

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1-8. (Canceled)

9. (Currently Amended) An electromagnetic retarder adapted to be arranged between a brake pedal and at least one wheel of a vehicle for assisting braking thereof through a transmission, the electromagnetic retarder comprising:

~~a rotor; and~~

a stator adapted to be mounted on a fixed part of the vehicle, wherein the stator has at least one cavity formed therein and arranged to allow circulation of fluid therethrough for cooling the stator;

a rotor inserted inside the stator and configured to rotate about an axis of the stator which defines the central axis of the electromagnetic retarder;

at least one coil carried by the rotor; and

an excitation alternator configured to provide electric power to the coil,

wherein the electromagnetic retarder ~~is configured to be~~ offset in relation to the transmission by means of a speed increasing device, so that the axis of the electromagnetic retarder is offset from and parallel to an axis of the transmission.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) The electromagnetic retarder of claim 9[[11]], wherein the speed increasing device comprises a gear device.

13. (Currently Amended) The ~~apparatus~~electromagnetic retarder of claim 12, wherein the electromagnetic retarder comprises an arm integrated with the rotor, and wherein the speed increasing device is disposed between the arm and a shaft of the transmission.

14. (Currently Amended) The electromagnetic retarder of claim 9, wherein:

~~the rotor is disposed within the stator and configured to rotate about an axis of the stator; and~~
the at least one cavity is formed within a wall of the stator and is extended by an extension supported by the wall that extends to an end of the stator ~~generally~~ perpendicular to a central axis of the electromagnetic retarder.

15. (Canceled)

16. (Original) The electromagnetic retarder of claim 15, wherein:

the rotor is hollow; and
the excitation alternator is disposed at least partially inside the rotor.